Confirmation No. 8828

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	SPINDLER *et al.*	Examiner:	Garcia, Santiago
Serial No.:	10/583,077	Group Art Unit:	2611
Filed:	June 15, 2006	Docket No.:	AT030072US1 (NXPS.625PA)

Title: SYNCHRONIZATION DURING ANTI-COLLISION

APPEAL BRIEF

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Dear Sir:

This Appeal Brief is submitted pursuant to 37 C.F.R. §41.37, in support of the Notice of Appeal filed February 3, 2011 and in response to the rejections of claims 1-8, 10-18 and 20-26 as set forth in the Final Office Action dated November 3, 2010.

Please charge Deposit Account No. 50-4019 (AT030072US1) $540.00 for filing this brief in support of an appeal as set forth in 37 C.F.R. §1.17(c). If necessary, authority is given to charge/credit Deposit Account 50-4019 additional fees/overages in support of this filing.

I. Real Party In Interest

The real party in interest is NXP Semiconductors. The application is presently assigned of record, at reel/frame nos. 019719/0843 to NXP, B.V., headquartered in Eindhoven, the Netherlands.

II. Related Appeals and Interferences

While Appellant is aware of other pending applications owned by the above-identified Assignee, Appellant is unaware of any related appeals, interferences or judicial proceedings that would have a bearing on the Board's decision in the instant appeal.

III. Status of Claims

Claims 1-8, 10-18 and 20-26 stand rejected and are presented for appeal. Claims 9 and 19 have been allowed. A complete listing of the claims under appeal is provided in an Appendix to this Brief.

IV. Status of Amendments

An amendment was filed on January 3, 2011 in response to the Final Office Action dated November 3, 2010. The Advisory Action dated January 12, 2011 indicates that the amendment was entered.

V. Summary of Claimed Subject Matter

As required by 37 C.F.R. § 41.37(c)(1)(v), a concise explanation of the subject matter defined in the independent claims involved in the appeal is provided herein. Appellant notes that representative subject matter is identified for these claims; however, the abundance of supporting subject matter in the application prohibits identifying all textual and diagrammatic references to each claimed recitation. Appellant thus submits that other application subject matter, which supports the claims but is not specifically identified above, may be found elsewhere in the application. Appellant further notes that this summary does not provide an exhaustive or exclusive view of the present subject matter, and Appellant refers to the appended claims and their legal equivalents for a complete statement of the invention.

Commensurate with independent claim 1, an RFID device is configured for non-contact communication with a reading device via modulated electromagnetic signals that contain at least one of data and commands packed in data frames. *See, e.g.*, Figures 4 and 5 and pp. 9:25-12:27. The RFID device includes a synchronizing circuit, a data control circuit and a synchronization status test circuit. *Id.* The synchronizing circuit effects synchronization of the RFID device with the reading device responsive to receipt of a data frame containing synchronizing information from the reading device. *See, e.g., id.*, Figure 10 and pp. 12:32-14:9. The data control unit responds to receipt by the reading device of a data frame containing synchronizing information by receiving data frames with the synchronization information removed by the synchronizing circuit, and receives data frames from a command not containing synchronization information for effecting synchronization of the RFID device received by the reading device. *See, e.g., id.* and 14 in Figure 10. The synchronization status test circuit detects whether the RFID device runs synchronously with the reading device, and switches the synchronizing circuit on responsive to detecting that the RFID device is not synchronized with the reading device. *See, e.g., id.* and 15 in Figure 10. The RFID device receives multiple different types of commands as groups of data frames from the reading device, and at least one of the received commands does not contain synchronizing information for effecting synchronization of the RFID device with the reading device. *See, e.g.*, Figures 4 and 5 and pp. 9:25-12:27.

Commensurate with independent claim 11, an RFID system includes at least one reading device and at least one transponder respectively for non-contact communication via modulated electromagnetic signals that contain at least one of data and commands packed in data frames. *See, e.g.*, Figures 4 and 5 and pp. 9:25-12:27. The reading device transmits multiple different types of commands as groups of data frames to the transponder, at least one of the commands containing synchronization information for effecting synchronization of the reading device with the transponder and at least one of the commands not containing the synchronization information. *Id.* The transponder includes a synchronization circuit configured to effect synchronization of the transponder with the reading device responsive to receipt of a command that contains the synchronization information, and including synchronization status test circuit configured for detecting whether the transponder runs

synchronously with the reading device and to switch on the synchronization circuit responsive to detecting that the transponder is not synchronized with the reading device. *See, e.g., id.* and 14 in Figure 10.

Commensurate with independent claim 20, an anti-collision method for determining a number of transponders in an effective area of a reading device, the reading device communicating with the transponders without contact via modulated electromagnetic signals that contain at least one of data and commands packed in data frames, is carried out as follows. *See, e.g.*, Figures 4 and 5 and pp. 9:25-12:27. The reading device transmits an inventory command as a group of data frames for determination of the transponders present in the effective area, the inventory command containing synchronization information for synchronization of the reading device with the transponders. *See, e.g., id.* and p.12:1-27. Each of the transponders present in the effective area and responsive to the inventory command transmits a response with a unique identification number that identifies the transponder to the reading device. *See, e.g., id.* and p. 6:7-26. The reading device transmits a repeat command as a group of data frames responsive to the reading device receiving mutually colliding responses from several of the transponders, the repeat command causing the transponders to retransmit their responses and the repeat command not containing the synchronization information. *Id.* The reading device transmits a confirm command to each of the transponders whose response was received without errors, the confirm command causing each of the transponders whose response was received without errors not to respond to the repeat command and the confirm command not containing the synchronization information. *See, e.g., id.* and p.12:1-27. The reading device repeats the transmission of confirm commands and repeat commands until none of the transponders respond within a specified time interval. *Id.*

VI. Grounds of Rejection to be Reviewed Upon Appeal

The grounds of rejection to be reviewed on appeal are as follows:

A. Claims 1-8 and 10-18 stand rejected under 35 U.S.C. 103(a) over Thierry Roz (WO 99/60510) in view of Shigyo (U.S. Patent No. 6,430,209) and further in view of Raphaeli (U.S. Patent Pub. 2007/0109099).

B. Claims 20-26 stand rejected under 35 U.S.C. § 103(a) over the '510 reference in view of the '099 reference.

VII. Argument

Appellant believes that the (final) Office Action has misinterpreted the primary '510 reference, upon which the rejections of each claim listed under both grounds of rejection above rely. In short, the Office Action appears to have misinterpreted a "clock extraction circuit" that provides a synchronization output, as somehow corresponding to a circuit that modifies data frames by removing synchronization information, and passing the modified frames (with synchronization information removed) to a control unit. The Office Action further appears to mistakenly interpret the receipt of signals without any synchronization information as corresponding to receiving and removing such information. Appellant believes that the above errors render all rejections improper, and further notes (for the Board's convenience) that resolution of this matter as detailed further in Section A(1) below would appear to render all rejections improper. The following discusses these and other matters in greater detail.

A. The § 103(a) Rejection Of Claims 1-8 And 10-18 Fails To Establish Teaching Or Suggestion Of The Claims As A Whole, And Lacks Motivation.

1. The Proposed Combination Of The '510, 209 And '099 References Fails To Correspond To Claims 1-8 And 10 As Asserted.

Appellant traverses the § 103(a) rejection of claims 1-8 and 10-18 because the cited '510 reference either alone or in combination with the '209 and '099 references lacks correspondence to the claimed invention. For example, the (final) Office Action has failed to establish that the asserted references teach the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, an RFID device having a synchronizing circuit that receives

(and removes) data frames containing synchronization information, and providing the data frames with synchronization information removed to a data control unit. Likewise, the Office Action failed to establish that the asserted references teach an RFID device having a data control unit that operates under conditions in which: for data frames (received via modulated electromagnet signals) that do not contain synchronizing information, the data frames are received; and for data frames that contain synchronizing information, the frames are received as processed at the aforesaid synchronizing circuit to remove the synchronization information. As yet another example, the Office Action has failed to establish that the cited references disclose a confirm command signal not containing synchronization information. As such, the rejections fail.

Importantly, Appellant submits that the Office Action has misinterpreted aspects of the cited references relating to the receipt and processing of data frames with and without synchronization information, and has failed to address the claims as a whole when attempting to assert correspondence. For example, the Office Action has asserted that the control logic 312 receives data frames from the clock extraction circuit 312 with synchronization information in the frames removed, simply because the "[c]lock extraction circuit 312 is coupled to 302." Appellant submits that this assertion is unsupported in, and apparently contradicted by, the discussion of these circuits in the '510 reference. For example, the last paragraph beginning at page 10 of the (translated) reference describes that the clock extraction circuit 312 supplies "to control logics 302 a clock signal CLK derived from the frequency of the electromagnetic field 1 transmitted by reading unit 20." Appellant has reviewed the '510 reference and cannot ascertain any disclosure that would support the Office Action's assertions regarding the clock extraction circuit 312 and functionality to remove synchronization information from data frames (as discussed above, the clock extraction circuit derives the clock signal "from the frequency of the electromagnetic field 1," and would thus not appear to "remove" synchronization information from any data frame as asserted in the Office Action.)

Accordingly, the Office Action has not only failed to establish that the control logics 302 receives data frames with synchronization information removed, the Office Action has not established that the clock extraction circuit 312 removes any synchronization information

at all, or would be capable of providing data frames to the control logics 302, with or without synchronization information. As such, the rejections have failed to establish correspondence as asserted.

While further discussion of the impropriety of the rejections is believed unnecessary to warrant reversal of all rejections, Appellant further submits that the proposed addition of the '099 reference, as disclosing transmitting a "command that does not contain any synchronization information," also fails to overcome the lack of correspondence as discussed above. Specifically, the Office Action has asserted that the '099 reference sends interrogation signals that do not include any synchronization information, and that this somehow corresponds to sending command signals under conditions in which some of the command signals include synchronization information and some do not. Appellant submits that this assertion is mistaken, as the Office Action has not established that the interrogation signals are command signals and perform the function of the confirm command as asserted.

In particular, the Office Action has failed to establish that the different integration signal including a short repeat message corresponds to a repeat command not containing synchronization information. Instead of citing any portion of the '099 (or any) reference that would explain the short repeat message as not including synchronization information, the Office Action offers only an opinion (of the Examiner) regarding this short repeat message. Referring to page 7 of the Office Action, the Examiner has asserted that the commands "do not need synchronization information" and the command "does not contain any synchronization information." However, no evidence or explanation has been provided in support of this assertion. Therefore, the cited interrogation signals cannot correspond to the claimed confirm command signals of which some do not contain synchronization information.

In view of the above, the proposed combination of references fails to correspond as asserted, and the record as it stands is insufficient for maintaining the § 103(a) rejection of claims 1-8 and 10. Appellant therefore requests that the § 103(a) rejections of claims 1-8 and 10 be reversed.

2. The Office Action Failed To Establish Motivation For Combining The Cited References, And The References Teach Away From The Proposed Combination.

Appellant respectfully traverses the § 103 rejection of claims 1-8 and 10-18 because the cited references teach away from the Office Action's proposed combination. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main ('510) reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (U.S. 2007). ("[W]hen the prior art teaches away from combining certain known elements, ..."). As applicable here, the proposed hypothetical embodiment would be inoperable for providing a clock signal, for communicating interrogation information in a manner consistent with the cited references, and for operating control logic 302.

More specifically (and as consistent with the above discussion), the proposed hypothetical embodiment would involve modifying the clock extraction circuit 312 to provide data frames to control logics 302. As discussed above, the purpose of the clock extraction circuit 312 is to provide a clock signal to the control logics 302. The Office Action's proposed hypothetical embodiment would appear to replace this clock signal function with a data signal. Moreover, the proposed hypothetical embodiment would appear to replace the clock extraction circuit 312's approach to deriving a clock signal "from the frequency of the electromagnetic field 1" with another approach to removing synchronization information from a data signal. Under these conditions, it does not appear that the control logics 302 would be capable of operating (without a clock signal), or that the clock extraction circuit 312 would be capable of operating to derive any clock signal and/or to provide a modified data signal (with synchronization information removed).

Appellant further submits that the proposed modification would render the hypothetical embodiment involving the asserted combination of references inoperable because the resulting combination would involve shutting off control logics 302 when the transponder TR_i is in sync with the reading device. *See* Office Action at page 6. However, "modulator 306 is controlled by a control logics 302 coupled to memory 304." *See* '510

reference at page 10. If the control logics 302 is off, it cannot control the modulator 306, and transmission of the encoding data will not occur.

For at least these reasons, the asserted hypothetical combination of the '510 reference, the '209 reference and the '099 reference is inoperable. Under M.P.E.P. § 2143.01, the rejections cannot be maintained. Appellant therefore requests that the rejections be reversed.

3. The Proposed Combination Of The '510, 209 And '099 References Fails To Correspond To Claims 11-18 As Asserted.

Appellant traverses the § 103(a) rejection of claims 11-18 for reasons including those discussed in connection with the rejection of claims 1-8 and 10 as discussed in Section A(1) above, because the rejection of claims 11-18 relies solely upon the rationale provided in rejecting claims 1-8 and 10. Specifically, the rejection is based upon a statement (at page 10 of the Office Action) that "the claimed method including the features corresponds to subject matter mentioned in the rejection of claims 1-10 is applicable hereto." As discussed above, the rejection of claims 1-8 and 10 is improper because the Office Action failed to establish that the asserted references teach the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, an RFID device having a synchronizing circuit that receives (and removes) data frames containing synchronization information, and providing the data frames with synchronization information removed to a data control unit. Likewise, the Office Action failed to establish that the asserted references teach an RFID device having a data control unit that operates under conditions in which: for data frames (received via modulated electromagnet signals) that do not contain synchronizing information, the data frames are received; and for data frames that contain synchronizing information, the frames are received as processed at the aforesaid synchronizing circuit to remove the synchronization information. As yet another example, the Office Action has failed to establish that the cited references disclose a confirm command signal not containing synchronization information. Appellant thus incorporates its traversals as presented in Section A(1) above here, and thus submits that the rejections of claims 11-18 fail for relying upon similarly improper rationale.

Appellant further submits that the rejection of claims 11-18 is improper because the Office Action has failed to even assert correspondence to various claim limitations, including those in independent claim 11 and in claims 12-18 that depend therefrom. For example, the

Office Action has not explained which portions of claim 11 correspond to limitations in claim 1, or how the asserted combination of references as applied to claim 1, would somehow apply to claim 11. It further appears that the Office Action has overlooked such limitations, including those directed to an RFID system, with the system including both a reading device and a transponder. Reviewing the rejections of claims 1-8 and 10, Appellant cannot ascertain any assertions of correspondence to such a reading device, or to such a system including both a reading device and a transponder.

Accordingly, the rejection of claims 11-18 is improper for reasons including those discussed above in connection with claims 1-8 and 10, and further because the Office Action has not asserted correspondence to various limitations. Appellant therefore submits that the proposed combination of references fails to correspond as asserted, and that the record as it stands is insufficient for maintaining the § 103(a) rejection of claims 11-18. Appellant requests that the § 103(a) rejections of claims 11-18 be reversed.

B. The § 103(a) Rejection Of Claims 20-26 Fails To Establish Teaching Or Suggestion Of The Claims As A Whole, And Lacks Motivation.

1. The Proposed Combination Of The '510 And '099 References Fails To Correspond As Asserted.

Appellant traverses the § 103(a) rejection of claims 20-26 because the Office Action has failed to establish that the '510 reference, either alone or in combination with the '099, corresponds as asserted. For example, neither of the asserted references teaches the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, an anti-collision method in which transponders are discovered using an iterative confirm and repeat commands to stop transponders from responding, in which an initial inventory command is sent with synchronization information, and in which subsequent confirm and repeat commands do not contain synchronization information. As such, the rejections fail.

As a specific example of the lack of correspondence, the Office Action has failed to address aspects of the claimed invention as a whole, directed to transmitting an inventory command with synchronization data to synchronize transponders, transmitting confirm commands that stop the synchronized transponders from responding, and transmitting a repeat command to those synchronized transponders for which a response was not properly

received. In attempting to assert correspondence, the Office Action has simply cited to the '099 reference as disclosing transmitting some sort of signal that does not include synchronization information. Appellant submits that this citation stops short of providing any teaching or suggestion of transmitting such a signal in response to receiving colliding responses, or to control certain transponders to stop responding, while controlling other transponders to repeat their response. None of the cited references comprehends such an approach, and nothing in the Office Action provides any explanation as to how the '099 reference's transmission would or could correspond.

In addition, the Office Action has misinterpreted the cited retransmission of a synchronization signal as corresponding to a command signal used to cause transponders, which have already been synchronized, to retransmit a response. First, the Office Action acknowledges that the '510 reference does not teach providing a confirm command signal that does not contain synchronization. Referring to page 11, the Office Action further relies upon an assertion that the '511 reference's repeat of a command "to synch again" corresponds to the claimed repeat command signal. However, re-synchronizing transponders in this manner does not correspond as asserted (and would further appear to render the proposed combination inoperable as discussed below). To the extent that the Office Action is asserting that a SHIFT signal that "repeats the command to synch again" would be modified so that it would include no synchronization information, Appellant submits that such a modification would effectively remove the signal itself, and further that the Office Action has not established that any remaining portion of such a signal would include a repeat command. Further, while the '099 reference is cited as teaching an interrogation signal that does not contain synchronization information, the interrogation signal does not perform the function of the confirm command and therefore cannot correspond to the claimed confirm command.

In view of the above, the proposed combination of references fails to correspond as asserted, via the lack of asserted correspondence to the claimed invention as a whole, and in view of the Office Action's misinterpretation of the cited references. Accordingly, no reasonable interpretation of the asserted prior art, taken alone or in combination, can provide

correspondence. Accordingly, the § 103(a) rejection of claims 20-26 fails and Appellant requests that it be reversed.

2. The Office Action Failed To Establish Motivation For Combining The Cited References, As The References Teach Away From The Proposed Combination.

Appellant further traverses the § 103 rejection of claims 20-26 because the cited references teach away from the Office Action's proposed combination. Consistent with the *KSR* decision, M.P.E.P. § 2143.01 explains the long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main ('510) reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (U.S. 2007). ("[W]hen the prior art teaches away from combining certain known elements, ..."). As applicable here, the Office Action has proposed a combination of references in which aspects would necessarily be rendered inoperable, in order to correspond as asserted.

More specifically, Appellant submits that the proposed combination would render the hypothetical embodiment inoperable (as corresponding to the intended purpose of the '510 reference), as modifying the synchronization signal so that it does not include synchronization information would appear to remove the signal in its entirety. In addition, repeating "the command to synch again" as asserted at page 11 of the Office Action would appear to result in previously-synchronized transponders no longer being synchronized with the new synchronization signal. Further, the asserted hypothetical embodiment would appear to replace the MUTE command of the '510 reference (asserted to correspond to a confirm command) with an interrogation signal. Without the MUTE command, each of the devices would respond to each subsequent command, such that the resulting embodiment would be incapable of identifying each individual device and resolve multiple reply signals.

Accordingly, the asserted hypothetical combination of the '510 reference and the '099 reference would result in an inoperable embodiment. Under M.P.E.P. § 2143.01, there is therefore no motivation for combining references as asserted. Appellant therefore requests that the rejections be reversed.

VIII. Conclusion

In view of the above, Appellant submits that the rejections of claims 1-8, 10-18 and 20-26 are improper and therefore requests reversal of the rejections as applied to the appealed claims and allowance of the entire application.

Authority to charge the undersigned's deposit account was provided on the first page of this brief.

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APPENDIX OF CLAIMS INVOLVED IN THE APPEAL
(10/583,077)

1. An RFID device for non-contact communication with a reading device via modulated electromagnetic signals that contain at least one of data and commands packed in data frames, the RFID device comprising:

synchronizing circuit configured to effect synchronization of the RFID device with the reading device responsive to receipt of a data frame containing synchronizing information from the reading device;

a data control unit configured and arranged to, in response to receipt by the reading device of a data frame containing synchronizing information, receive data frames with the synchronization information removed by the synchronizing circuit, and configured and arranged to receive data frames from a command not containing synchronization information for effecting synchronization of the RFID device received by the reading device;

synchronization status test circuit configured to detect whether the RFID device runs synchronously with the reading device and to switch on the synchronizing circuit responsive to detecting that the RFID device is not synchronized with the reading device,

wherein the RFID device is configured to receive multiple different types of commands as groups of data frames from the reading device, and wherein at least one of the received commands does not contain synchronizing information for effecting synchronization of the RFID device with the reading device.

2. An RFID-device as claimed in claim 1, in which the synchronizing circuit is configured in such a manner that every received data frame is to be treated as a data frame containing synchronization information.

3. An RFID device as claimed in claim 1, in which the synchronization status test circuit cooperates with a data frame error counter to count the number of erroneously received data frames and in the event of exceeding of a specified error limit, to switch on the synchronizing circuit.

4. An RFID device as claimed in claim 3, in which the synchronization status test circuit is configured to switch off the synchronizing circuit in the event of a correctly received data frame.

5. An RFID device as claimed in claim 1, in which the synchronization status test circuit is configured for detection of synchronization start signals in the received electromagnetic signals which synchronization start signals are transmitted outside the data frame, where the synchronization status test circuit switches on the synchronizing circuit on detection of a synchronization start signal.

6. An RFID-device as claimed in claim 5, in which the synchronization status test circuit is configured to detect a degree of modulation of the received electromagnetic signals and to recognize as a synchronization start signal a received electromagnetic signal whose modulation factor lies in a specified range.

7. An RFID device as claimed in claim 6, in which the synchronization status test circuit is configured to recognize as a synchronization start signal a received electromagnetic signal whose modulation factor is over 50% up to complete field disconnection.

8. An RFID-device as claimed in claim 1, in which the synchronization status test circuit cooperates with a Watchdog-Timer to switch on the synchronizing circuit after the lapsing of a specified interval, during which no correct data frame could be received.

10. An RFID-device as claimed in claim 1, in which the RFID-device is configured as a transponder.

11. An RFID system, comprising:

at least one reading device and at least one transponder, the reading device and the transponder configured for non-contact communication via modulated electromagnetic signals that contain at least one of data and commands packed in data frames,

the reading device configured for transmitting multiple different types of commands as groups of data frames to the transponder, at least one of the commands containing synchronization information for effecting synchronization of the reading device with the transponder and at least one of the commands not containing the synchronization information,

the transponder including synchronization circuit configured to effect synchronization of the transponder with the reading device responsive to receipt of a command that contains the synchronization information, and including synchronization status test circuit configured for detecting whether the transponder runs synchronously with the reading device and to switch on the synchronization circuit responsive to detecting that the transponder is not synchronized with the reading device.

12. An RFID system as claimed in claim 11, in which the reading device is configured to transmit inventory commands, responsive to the inventory commands, each transponder present in an effective area of the reading device is configured to report to the reading device.

13. An RFID system as claimed in claim 11, in which the synchronization status test circuit cooperates with a data frame error counter to count the number of erroneously received data frames and in the event of exceeding of a specified error limit, to switch on the synchronizing circuit.

14. An RFID system as claimed in claim 13, in which the synchronization status test circuit is configured to switch off the synchronizing circuit in the event of a correctly received data frame.

15. An RFID system as claimed in claim 11, in which the reading device is configured to send synchronization start signals as electromagnetic signals before data frames containing synchronization information, and the synchronization status test circuit of the transponder are configured for detecting the synchronization start signals in the received electromagnetic

signals and to switch on the synchronization circuit on detection of a synchronization start signal.

16. An RFID system as claimed in claim 15, in which the reading device is configured for sending an electromagnetic signal as a synchronization start signal, the synchronization start signal having a modulation factor in a specified range and the synchronization status test circuit are configured to detect synchronization start signals from the modulation factor of the received electromagnetic signals.

17. An RFID system as claimed in claim 16, in which the reading device is configured for sending an electromagnetic signal as a synchronization start signal with a modulation factor of over 50% up to complete field disconnection.

18. An RFID system as claimed in claim 11, in which the synchronization status test circuit cooperates with a Watchdog-Timer to switch on the synchronizing circuit after the lapsing of a specified interval, during which no correct data frame could be received.

20. An anti-collision method for determining a number of transponders in an effective area of a reading device, the reading device communicating with the transponders without contact via modulated electromagnetic signals that contain at least one of data and commands packed in data frames, the method comprising:

transmitting, by the reading device, an inventory command as a group of data frames for determination of the transponders present in the effective area, the inventory command containing synchronization information for synchronization of the reading device with the transponders;

transmitting, by each of the transponders present in the effective area and responsive to the inventory command, a response with a unique identification number that identifies the transponder to the reading device;

transmitting, by the reading device, a repeat command as a group of data frames responsive to the reading device receiving mutually colliding responses from several of the

transponders, the repeat command causing the transponders to retransmit their responses and the repeat command not containing the synchronization information;

transmitting, by the reading device, a confirm command to each of the transponders whose response was received without errors, the confirm command causing each of the transponders whose response was received without errors not to respond to the repeat command and the confirm command not containing the synchronization information; and

repeating, by the reading device, transmission of confirm commands and repeat commands until none of the transponders respond within a specified time interval.

21. An anti-collision method as claimed in claim 20, in which the transponders respond to the reading device at randomly selected delays.

22. An anti-collision method as claimed in claim 21, in which the delay selectable by the transponder lies in a round, which has a number of time slots which are pre-defined and possibly variable by the reading device with durations, which are defined and possibly variable by the reading device.

23. An anti-collision method as claimed in claim 22, in which the reading device transmits nothing more than a Confirm command or a Repeat command per time slot, where a time slot is optionally early scheduled by these commands.

24. An anti-collision method as claimed in claim 22, in which the Repeat command triggers the transponders to start a new round.

25. An anti-collision method as claimed in claim 22, in which the reading device sends a Next Time Slot command, if no transponder responds within a time slot, where the Next-Time slot command is preferably sent in a data frame with synchronization information.

26. An anti-collision method as claimed in claim 22, in which the anti-collision method is scheduled if no transponder responds within a round.

APPENDIX OF EVIDENCE

Appellant is unaware of any evidence submitted in this application pursuant to 37 C.F.R. §§ 1.130, 1.131, and 1.132.

APPENDIX OF RELATED PROCEEDINGS

As stated in Section II above, Appellant is unaware of any related appeals, interferences or judicial proceedings.